

# TIMELINEZ

Volume 3 Issue 2/3

February/March

\$1.00

*Jungle Jim: VARS  
McDonaghey: Monitor  
Peninsula et al Library*

*N/L exchange  
Who will help me?  
Calendar*

*Phone list search  
Mscript/Tasman II  
Tasword on Microdrive*

## WE'RE GOING TO THE FAIRE

The Bay Area T/S groups have been invited to exhibit free at the 10th West Coast Computer Faire from March 30 - April 2. We will have a 10' x 10' booth space at Moscone Center as well as 8 Exhibitor Badges.

The regular price to attend the faire is \$12/day or \$20/4 days. We plan to distribute the free Exhibitor Badges each morning and afternoon to user group members who request them. We will ask you to take a turn watching the booth, but you should also have plenty of time to wander around.

We will have T/S computers, literature, demos, etc., available at the booth. We have also invited Sinclair to share our space and demonstrate their new products.

If you wish to help at our booth please call George Mockridge at 415 359-3198. For those who wish to purchase their tickets, we also have a supply of \$4 off coupons. Please send a SASE to the TIMELINEZ address to receive one.

See us at the Faire'

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To order send \$19.95 plus \$2.00 P&H for cassette and manual.  
Tom E. Cole, 1314 Speight #15, Waco, TX 76706. Texans add local tax.

Last month's and this month's issues of Timelinez include an extra two pages to make up for the lack of a February issue. I am to blame for the missing issue. Because of the Christmas season, January's issue came out very late, February was a short month, and I have tried to catch up by getting March's issue out on time. I hope you find the added pages interesting. I am now back on schedule. Keep your articles coming!

Jim March

TIMELINEZ (c) is the joint publication of the three Timex/Sinclair user groups in the San Francisco Bay Area.

If you would like to meet other T/S users, come to one of our meetings (see inside for times and locations). There are groups that meet in Burlingame, Oakland, and Santa Clara each month. New members are always welcome, whether you are a hardware or software buff, beginner or expert. If you like our meetings, become a member for \$15 per year and get TIMELINEZ free!

If you can not attend our meetings, you can subscribe to our newsletter for \$10 per year. Send your check to TIMELINEZ, P. O. Box 1312, Pacifica, CA., 94044.

We hope to see YOU at our next meeting!



One of the fun parts of owning a small computer like the T/S 1000 is that it is easier to learn how the machine works:

In the T/S 1000 there is the BASIC ROM (Read Only Memory) which is 8K (8\*1024 bytes) worth of machine language program. This 8K program defines the "operating system" of the computer. An operating system is the software which manages all the hardware and software you attach and/or put into your system. So what, you may ask? Well, if you want to know how your computer works, you have to learn about its operating system. For example, it is the operating system which decides where to store program lines, display file, variables, etc., in the RAM (Random Access Memory). It is the operating system which generates the TV picture and tape signals for the T/S 1000. In other words, it is the

operating system which runs the show!

In this month's article, as in previous articles, I discuss "system variables". These variables are similar to the variables which you may define in a BASIC program. However, rather than you defining the variable and its value, system variables are defined by the operating system. Some of these system variables are "pointers". A pointer is a variable which, instead of holding the final answer itself, "points" to the location of the answer.

D\_FILE, VARS, E\_LINE and RAMTOP are system variable pointers.

**VARS** System variable. Memory address 16400 (4010H), two-byte variable. VARS is a system variable which holds the starting address of the variables area in memory. E\_LINE holds the ending address.

Since the variables area in memory is above the program and the display file areas of memory, VARS is constantly changing. PEEKing VARS is unlikely to be useful, and POKEing VARS is likely to make you lose your program.

I have used VARS when I want to transfer data from a machine language program to a BASIC program or vice-versa.

Sections of this article are reprinted courtesy of the Book Company, Los Angeles, from the book The Timex/Sinclair User's Encyclopedia by G. Phillips and J. March, 1984.

\*\*\*\*\*  
*Copies of The Timex/Sinclair User's Encyclopedia are available for \$13.00 (includes postage and handling) from Jim March, 3216 Partridge Ave., Oakland, Ca., 94605 or for \$14.95 plus tax at bookstores (including Stacey's in Palo Alto and San Francisco).*  
 \*\*\*\*\*

## MONITOR FOR TIMEX 2068

BY PHIL MCCONAGHEY

I purchased a Model No. 4084 from Sears, Roebuck & Co. (\$364.00 including tax) together with RGB Cable Model 6539 (\$18.00). After modifying my computer using an RGB Conversion kit #220-453 from E. Arthur Brown Co., 1702 Oak Knoll Drive, Alexandria, MN 56308 (\$19.95). This requires opening the computer and doing some soldering inside. Then I connected the wiring as follows:

### CONVERSION KIT CABLE

Brown  
Red  
Orange  
Green & Yellow  
White  
Black  
+ 5 volts\*

### RGB SEARS CABLE

Orange  
Red  
Brown  
Bare wire  
Green  
Blue  
Yellow

\*Run a separate wire (not included) connected to the +5 volts location shown in the instructions for the RGB Conversion Kit.

Try out the new system by entering BORDER 6. If the edges of the display have the wiggles or the screen goes blank, open the computer and adjust the Horizontal by turning the "VRI" located in the bottom left side and/or the "CS" which is at the middle upper right part of the Board.

I now have fantastic clearness and color. I noticed Sears has this monitor on sale recently for \$319.00.

## LOCATION FOR MACHINE CODE

By PHIL MCCONAGHEY

When you turn on your Timex 2068 computer POKÉ 23730,255 and ENTER ; then press NEW and ENTER. This will put RAMTOP at address 65535 which is as high as possible. Then input the following:

9999 PRINT FREE - 276

when you GOTO 9999 the screen will display 38534 which is the amount of bytes available in RAM for your program. This not only gives you another 168 bytes of RAM for programming, but also provides a protected area of 276 bytes between addresses 65260 and 65535 for Machine Code. The computer will not overwrite that area because when the size of your program reaches address 65259, the bottom of the screen indicates "OUT OF MEMORY". You can place Machine Code in this space and save on tape using the command:

SAVE " " Code 65260,276

This little trick should not be used if you intend to utilize the UDG (User Defined Graphics) mode.

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PRINTERS, MODEMS, MONITORS,  
INTERFACES, SPECTRUM ROMS

### SOFTWARE

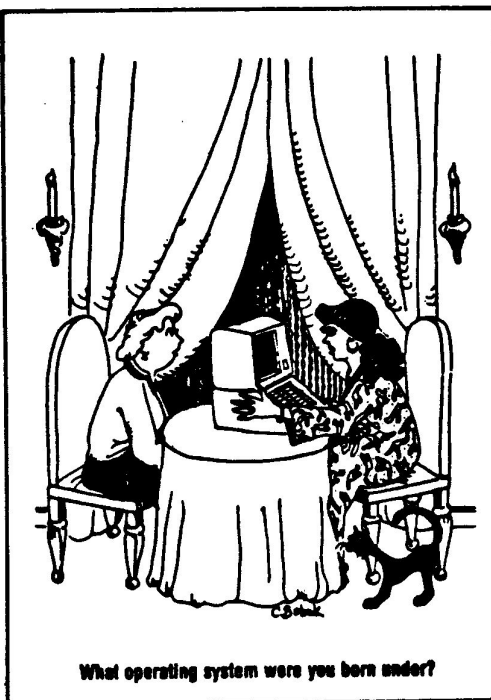
GAMES, EDUCATION, BUSINESS,  
ADVENTURE, UTILITIES

### BOOKS AND MAGAZINES

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T/S 1000/1500 HARDWARE  
T/S 1000/1500 BOOKS

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ELECTRONICS  
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SAN FRANCISCO, CA 94116  
(415) 665-8330

WRITE FOR FREE CATALOG!!



What operating system were you born under?

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Computer Software News  
©Labhar-Friedman Inc.  
425 Park Avenue  
New York, NY 10022

"Softsmiles"

Presented by

Ingram  
Software

### \*\*\*PENINSULA/SOUTH BAY JOINT SOFTWARE LIBRARY NEWSBRIEF\*\*\*

- \* A Comprehensive catalog of library software will soon be available. Cost: \$1.00 at meetings, \$2.00 by mail.
- \* Our library is interested in swapping high-quality Public-domain software with other user-groups or individuals.  
-First let's swap catalogs; I'll show you mine if you show me yours, tee hee.
- \* Our library will also accept orders for cassettes of public-domain software from members or nonmembers. Cost including s&h: \$3.00 per cassette, \$1.00 per program. Checks to: Jack Dohany. (Please order the catalog first.)
- \* For those interested in Assembly Language: The Hisoft Devpac Assembler/Disassembler/Debugger is great. Allows you to disassemble into a source file which can then be operated on by the assembler. Devpac is for Spectrum, but can be easily modified to run on 2068. Send SASE for Poke List. Note: Devpac is entirely in MC, and is RELOCATABLE anywhere in RAM. (Devpac is not in the library and is not public-domain, but can be ordered from England.)
- \* New in the library:
  1. A relocatable version of Aerco's Print Driver, for owners of the Aerco 2068 Parallel Printer Interface.
  2. Extended Basic (sprite graphics) for Spectrum/2068, by R. Newman, translated for 2068 by J. Dohany. More power to Basic: up to 256 user-definable characters, any of which may be up to 256x176 dots in size. Public Domain.
- \* Librarian: Jack Dohany, 325 O'Connor St, Menlo Park, CA 94025 (415) 321-7684

#### @ NEWS

BY Bill Miller 408 253-3175

@ NEWS is a place for ESFOA (Excellent Stringy Floppy Owners Association) members to exchange information.

How do I join ESFOA? you may ask.

ESFOA is for people interested in the Exatron, CAI, or A&J Stringy Floppies- despite what the name implies, you don't have to own one.

We will also exchange information about the BSR Wafadrive (which uses the same wafer as the A&J 2000 ESF) and the ZX and QL Microdrives which are also endless loop tapes and also other drives which use the endless loop tape concept (like the Floppy?).

For those of you interested in using ZX Microdrives with your TS2068, N. A. Pashtoon discusses a TS2068/ ZX Microdrive interface in the 8412/8501 and 8502 issues of

LIST (Long Island Sinclair Timex) Group, P.O. BOX 438, Centerport, NY, 11721- 0438.

Back issues may be available for \$1.50 each, contact LIST.

If you have Stringy Floppy news or questions, send them to:

Bill Miller, SUSTUG (Silicon Valley Sinclair Technology Users Group), Information Coordinator, P.O. BOX 4133, Santa Clara, CA, 95054-0133.

FROM THE T/S USERS GROUP OF CINCINNATI

## PUTTING MACHINE CODE INTO MTERM Rick Conard

As you may already know the buffer of SMART II occupies the BASIC area of a TS 2068. To simply say LOAD ""CODE 26710 will result in the error "nonsense in basic". This can be achieved by opening the buffer far enough to hold the code. Looking at the system memory in the manual you will find that the variables are kept just above the program. By changing the address in the system variable VARS, you can open the buffer far enough to hold your code. For example: Suppose you wanted to upload a MC routine to a friend and the code was 1500 bytes long. First add 1500 26710. You will get 28210. This is the address we want VARS to point to. To get this into VARS, enter as a direct command this>> POKE 23627,28210-256\*INT (28210/256): POKE 23628,INT (28210/256). The buffer has now been opened up by 1500 bytes. You can now use LOAD ""CODE 26710. The person receiving the code should use SAVE "name"CODE 26710,1500 to save the code. Almost certainly the code doesn't belong at 26710. No problem. Rewind the tape and use the address the code should start at. If it should be loaded at 32000 then use LOAD ""CODE 32000 to load it into the right place. With the code in the proper place you can now save it so that it will load into the right place from tape. In our example you would use SAVE ""CODE 32000,1500. Now it will load into place without worry with LOAD ""CODE.

TO CHANGE TASWORD ADD THE FOLLOWING PROGRAM LINES AND BY POKING THE ADDRESSES LISTED BELOW BEFORE YOU LOAD TASWORD, YOU CAN CHANGE THE BORDER AND PAPER COLORS.

```
60>PRINT "64(2 32 printouts)
      Z"
81 IF a$="Z" THEN GO TO VAL "1
111
1111 LET b=FN p(VAL "62216"): GO
SUB VAL "1113": FOR x=b TO b+a
STEP VAL "64": LET a$="": FOR y=
x TO x+VAL "31": LET a$=a$+CHR$
PEEK y: NEXT y: LPRINT a$: NEXT
x: GO SUB VAL "1113": LPRINT "
1112>GO SUB VAL "1114": FOR x=b+
VAL "32" TO b+a STEP VAL "64": L
ET a$="": FOR y=x TO x+VAL "31":
LET a$=a$+CHR$ PEEK y: NEXT y:
LPRINT a$: NEXT x: GO SUB VAL "1
114": LPRINT "": RUN
1113 FOR x=PI/PI TO VAL "3": LPR
INT TAB 31;"-": NEXT x: LPRINT "
": RETURN
1114 FOR x=PI/PI TO VAL "3": LPR
INT "-": NEXT x: LPRINT "": RET
URN
```

FROM THE RANTOP  
T/S A/L IN OHIO

BORDER 64841,81  
64842,253  
-----  
PAPER 64197,81  
64198,253

FROM THE SUN A/L OF CHATTSVILLE, FL.

## Tasprint

TASPRINT is a utility produced by Tasman Software, the same firm in England which sells Tasword II and the Tasman interface. Tasprint can be used alone or merged with Tasword II to provide 5 additional typefaces to a dot matrix printer with graphics capabilities. In Tasword II, Tasprint is called up by typing the FREE keyword which shows on the screen as a 'tilde'. Tasprint uses two lines for each of its lines of print since its characters are double height. Tasprint is most useful for producing a nice flyer or other document that stands out from the typical computer dot matrix printout.

This typeface is designated as 'Lectura Light' which I like to use in conjunction with bold face 'Median'. There is also a superbold face, a computer face called 'Data' and a Script. A word or line may also be printed in **inverse** or **with a box**.

**COMPACTA** - bold and heavy, good for emphasis

**DATA-RUN** - A FUTURISTIC SCRIPT

**LECTURA LIGHT** - clean and pleasing to read

**MEDIAN** - a serious business-like script

**POINCE SCRIPT** - a distinctive flowing font

--Richard Cravy

NOTE FROM THE CINCINNATI A/L

THE T/S CONNECTION SERVICE DEPT. IS NOW IN FULL OPERATION AND IS EQUIPPED TO HANDLE REPAIRS OF ALL T/S EQUIPMENT.

Technician Tim Carver is on hand to get that sick unit up and running in good order.

The T/S Connection has just purchased the entire inventory of the Timex Computer repair facility in Little Rock, and will soon have all of the necessary goodys to keep 'em running for a long time.

### T/S GUIDES

The following Bay Area User Group members have volunteered to provide help in specialized aspects of T/S computing. Each guide has had experience in dealing with a particular hardware or software product and is willing to share this knowledge with those who need help.

If you would like to become a T/S Guide, just send your name, address, phone number and area of expertise to TIMELINEZ. We will be happy to add you to the list.

EDITION 1:

**EPROM PROGRAMMING**  
2068 ROM DISASSEMBLY  
Bob Orrfelt  
3436 Bay Road  
Redwood City, CA 94063  
415 369-9136

**SPREAD SHEETS**  
Walt Gaby  
3325 Pierce St.  
San Francisco, CA 94123  
415 921-6077

**TAPE RECORDER DIAGNOSTICS**  
Bob Wheeler  
415 368-2491

**OLIVETTI 2300 PRINTER**  
**AERCO INTERFACE**  
Norm Lehfeldt  
757 Guerrero  
San Francisco, CA 94110  
415 285-0643

**OLIVETTI 2300 PRINTER**  
**TASHAN INTERFACE**  
Bill Strick  
415 522-3811

**A&J MICRO DRIVES**  
Bill Miller  
6675 Clifford Dr.  
Cupertino, CA 95014  
408 253-3175

**MACHINE LANGUAGE**  
**SPECTRUM TO 2068 PROGRAMMING**  
Jack Dohany  
325 O'Connor St.  
Menlo Park, CA 94025  
415 321-7604

**COMPUTER ASSISTED MUSIC INSTR.**  
John Hancock  
2859 Canyon Rd.  
Burlingame, CA 94010  
415 342-8457

**BLUE CHIP PRINTER**  
**TASHAN INTERFACE**  
**TASWORD WORDPROCESSOR**  
Rick Link  
654 40th St.  
Richmond, CA 94805  
415 234-3310

**HAM RADIO**  
Darwin Thompson  
2050 Dorland Dr.  
Fairfield, CA 94533  
707 425-0765

**SINCLAIR BASIC PROGRAMMING**  
George Mockridge  
263 Gateway Dr. #107  
Pacifica, CA 94044  
415 359-3198

**WESTRIDGE MODEM**  
**SMART TERM II**  
Pat Morrissey  
2000 Crystal Springs Rd.  
Bldg. 1 Apt. 22  
San Bruno, CA 94066  
415 952-5068

**VU-FILE**  
Walt Johnson  
21 Colorados Dr.  
Millbrae, CA 94030  
415 697-6212

## COMPUTER CALENDAR

### MARCH 1985

- 17 Peninsula User Group  
(415)359-3198 1 p.m.
- 21 East Bay Z80 User Group  
(415)234-3310 7:30 p.m.
- 26 Silicon Valley TS User Gr.  
(408)738-2888 X4579 7 p.m.
- 30 First day  
10th West Coast Computer Faire  
See you in our User Group booth at  
the Moscone Center in SF.  
4-day \$20  
(preregistration) \$15  
1-day \$12  
Voice (415)364-4294  
Modem (415)548-5751

### APRIL 1985

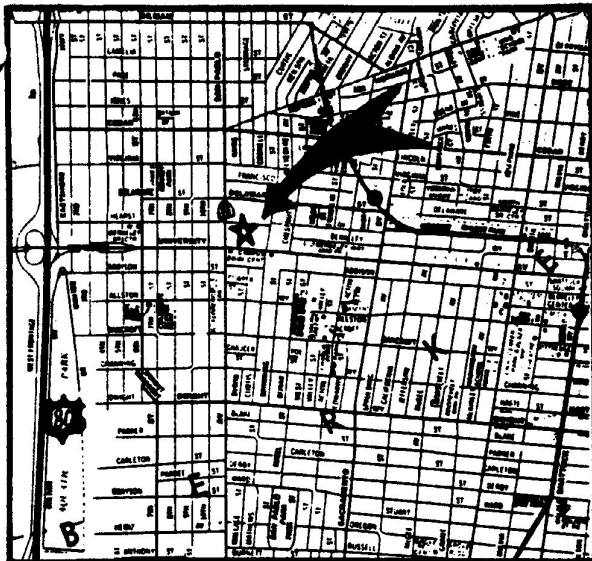
- 2 Last day 10th WCCF
- 18 East Bay Z80 User Group
- 21 Peninsula User Group
- 30 Silicon Valley TS User Gr.

Times and location may differ.  
Please call first.

## SUPERTAPE 45 PROGRAMS

FOR TS1000 and 2181

Games, graphics, text editor, assembler,  
sound, and utilities. Fantastic value!  
\$24.95 (£15) from JRC SOFTWARE, po box 448,  
Scottsburg, In 47170 USA Money-back guarantee.



**EBZUG**  
East Bay Z80 User Group  
654 40th Street  
Richmond, CA 94805  
(415) 234-3310 or 531-6566

**PRESIDENT** Joel Brody  
**NEWSLETTER EDITOR** Rick Link

**EBZUG** meets the third Thursday of each month at:

**WEST BRANCH BERKELEY PUBLIC LIBRARY** at the corner of University and San Pablo. Meetings start at 7:30 pm. Bring equipment and power strips.

**UPCOMING MEETINGS:**

March 21, 1985  
April 18, 1985



**PENINSULA USER GROUP - PUG**  
263 Gateway No. 107  
Pacifica, CA 94044  
(415) 359-3198 or 333-2231

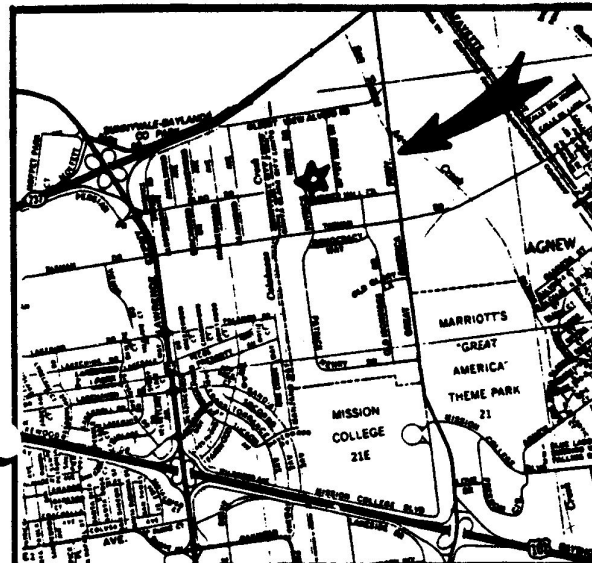
**PRESIDENT** George Mockridge  
**LETTER EDITOR** George Mockridge

**PUG** meets the third Sunday of each month at:

**PENINSULA HOSPITAL, 1783 EL CAMINO, BURLINGAME.** 1 pm. Meet room on lower level. Use North entrance. Bring equip. & extension cords if possible.

**UPCOMING MEETINGS:**

March 17, 1985  
April 21, 1985



**Silicon Valley SINCLAIR/TIMEX User Group (SVS/TUG)**  
P.O. BOX 4133  
Santa Clara, CA 95054-0133  
(408) 738-2888 x4579

**PRESIDENT** Rita Carr  
**NEWSLETTER EDITOR** Bill Miller

**SVS/TUG** meets the last Tuesday of each month at:

**Dysan Corp. Headquarters**  
5201 Patrick Henry Drive  
Santa Clara, CA

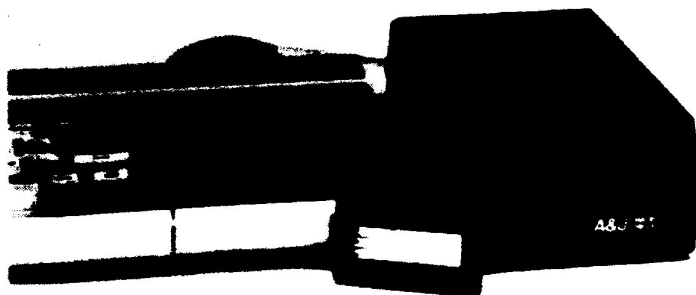
(Please use North entrance by the loading dock)

**UPCOMING MEETINGS:**

March 26, 1985  
April 30, 1985

A&J MICRO  
DRIVE

## MODEL 2000 STRINGY FLOPPY



## FEATURES

- Lowest cost high speed mass storage system available.
- High speed 11K baud data transfer rate.
- Loads 28K program in 24 seconds.
- Simple, easy to use!
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- Reliable and portable.
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PART #	PRODUCT	PRICE
820036	MODEL 2000 STRINGY FLOPPY II _____ includes: Interface, Drive, Expansion cardedge Owner's Manual, 5 Micro Wafer II, Wafer Organizer	\$ 199.50
	Add \$6.50 Shipping Charges	
830017	MODEL 2000 OWNER'S MANUAL _____	4.95
820040	MODEL 2000 DRIVE 2 _____	124.50
900001	10' MICRO WAFER II _____	4.25
900002	20' MICRO WAFER II _____	4.25
900003	35' MICRO WAFER II _____	4.50
900004	50' MICRO WAFER II _____	4.75
900005	62' MICRO WAFER II _____	4.75
850001	WAFER ORGANIZER (Folder holds 16 wafers) _____	5.00
850002	WAFER CADDY (Desk Top Tray Holds 6 wafers) _____	9.95
850003	WAFER WHEEL (Desk Top Wheel Holds 30 wafers) _____	18.75

## STANDARD WARRANTY:

All A&J Micro Drive Sales & Service products (except MICRO WAFERS) are warranted for 90 days. If your products should fail within 90 days, A&J Micro Drive will repair your products for no charge, if return postage paid. Additionally, all products may be returned postage paid within 30 days for full refund of purchase price. 30 day refund policy may vary with A&J Micro Drive Hardware suppliers.

## WAFER WARRANTY:

Wafers are guaranteed for a period of 45 days from date of shipment. If the wafer should fail during this period, return the wafer post paid and replacements will be returned as soon as possible at no charge.

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☐ U.P.S. shipping cost. add \$3.00, unless other specified

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Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

A&amp;J MICRO

1050 "I" EAST DUANE AVENUE, SUNNYVALE, CA 94086 (408) 732-9292

By Stuart Ree

This program makes a search for the first three letters in a name. When first used type in RUN 20 then save LINE 1. Always use GOTO and not RUN

```

10>GO TO 50
20 DIM N$(100,32)
30 LET N$(100)="END"
40 LET E$=""

50 PAPER 7: INK 0: BORDER 1: C
LS : POKE 23658,8
60 PRINT AT 0,0;"PHONE NUMBER
LIST" INK 2; FLASH 1;"ORDERS
PLEASE?" INK 0; FLASH 0;"LIST
ALL THE NAMES="; FLASH 1; INK 2
;"L"; FLASH 0; INK 0;"PUT NEW
NAME/NUMBER IN="; FLASH 1; INK
2;"N"; FLASH 0; INK 0;"FIND A
NUMBER="; FLASH 1; INK 2;"F"; F
LASH 0; INK 0;"RUB OUT A NAME/
NUMBER="; FLASH 1; INK 2;"R"; F
LASH 0; INK 0;"TO SAVE ON TAPE
="; FLASH 1; INK 5;"T"; FLASH 0
; INK 0;"TO STOP="; FLASH 1;
INK 4;"S"
70 INPUT Z$
80 IF Z$="N" THEN GO TO 370
90 IF Z$="F" THEN GO TO 140
100 IF Z$="R" THEN GO TO 490
110 IF Z$="L" THEN GO TO 280
115 IF Z$="T" THEN GO TO 720
120 IF Z$="S" THEN GO TO 710
130 GO TO 70
140 CLS
150 PRINT ,,, INK 2; FLASH 1;"
NAME PLEASE?"
160 INPUT Z$
170 IF LEN Z$<3 THEN GO TO 160
180 LET F=0
190 LET X=1
200 CLS
210 IF N$(X, TO 3)<>Z$( TO 3) T
HEN GO TO 240
220 LET F=1
230 PRINT ,,N$(X)
240 LET X=X+1
250 IF N$(X, TO 3)<>"END" THEN
GO TO 210
260 IF F=0 THEN PRINT Z$;" NOT
FOUND"
270 GO TO 680
280 CLS
290 LET X=0
300 LET X=X+1
310 POKE 23692,255
320 FOR K=1 TO 10: NEXT K
330 PRINT N$(X)
340 IF N$(X, TO 3)<>"END" THEN
GO TO 300
350 POKE 23692,255
360 GO TO 680
370 CLS
380 LET X=1
390 IF N$(X, TO 3)="END" THEN G
O TO 430
400 IF N$(X)=E$ THEN GO TO 450
410 LET X=X+1
420 GO TO 390
430 PRINT ,,"SORRY-NO MORE ROOM"

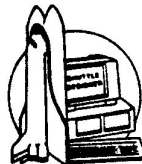
440 GO TO 680
450 CLS
460 PRINT "NEW NAME/NUMBER?"
470 INPUT N$(X)
480 GO TO 50
490 CLS

```

```

500 PRINT "RUB OUT WHICH NAME?"
510 INPUT Z$
520 LET X=1
530 IF N$(X, TO 3)="END" THEN G
O TO 630
540 IF N$(X, TO 3)<>Z$( TO 3) T
HEN GO TO 660
550 CLS
560 PRINT N$(X)
570 PRINT "PRESS R TO RUB OUT",
;"OR ENTER FOR NEXT ";Z$( TO 3)
580 INPUT R$
590 IF R$<>"R" THEN GO TO 660
600 PRINT ,,N$(X);" RUBBED OUT"
610 LET N$(X)=E$
620 GO TO 680
630 CLS
640 PRINT "NO MORE ";Z$( TO 3);
" NAMES IN THE LIST"
650 GO TO 680
660 LET X=X+1
670 GO TO 530
680 PRINT AT 21,12;"PRESS ENTER
FOR MORE"
690 INPUT Z$
700 GO TO 50
710 POKE 23693,56: STOP
720 SAVE "phone list" LINE 1

```



### SPACEWARE

EDUCATIONAL/GAME SOFTWARE

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## Mscript / Tasman Interface Users Patch Program Correction

Thomas Woods (PO Box 64, Jefferson, NH 03583) is offering a software patch to make the 64 column wordprocessor MSCRIPT function with the TASMAN centronics interface. The patch has a small error that on many printers causes a form-feed after each line is printed. If you have the patch and have followed all directions the following direct statements should solve most of your problems:

```
PRINT PEEK 42837 (enter)
      (you should get "12")
POKE 42837,10 (enter)
PRINT USR 36864 (enter)
```

and you're ready to go!

If you discover the code and location to stop the final form-feed after the entire document is printed (necessary for the old Epson tractor feeds, but wasteful on most other printers) please let us know and we'll print your "fix" in Timelinez.

## TASWORD on the A&J MICRODRIVE by Howard Ballinger

I have been highly pleased with Tasword (from Tasman 2.0W) on cassette and was eager to make it work on the A&J. If you own a copy of this program and a microdrive, read on. If not, look it over at the store. It works fine and seems very well set up.

Type or merge the following new lines into your tasword basic listing, then I suggest you insert a tape with "21" on it at location 1, RUN then STOP tasword, and ENTER "t" from the main menu. Line 700 SAVES the modified Basic, re-named "2tz", to M2, and the CODE to M3. Change to 1 & 2 if you wish.

Files may be SAVED either to Microtape or to cassette. For the former just use the proper form for saving -- "2d,filename" or whatever.

```
11 BEEP VAL ".1",VAL "0": BEEP
VAL ".1",VAL "16": RETURN
700 CLS : LET i=VAL "8": GO SUB
VAL "800": LET a$="tasword": SA
VE "2tz",LINE VAL "15"
710 SAVE "23,tasword"CODE VAL "
54784",VAL "10751": GO SUB VAL "
900"
780 VERIFY "2tz": PRINT AT VAL
"21",VAL "0": "*****3.4"
: AT VAL "19",VAL "0":
790 VERIFY "@tasword" CODE VAL
"54784",VAL "10751": PRINT AT VA
L "21",VAL "20": "*****3.4":
GO TO VAL "25"
800 RETURN
1098 IF a$(1)="@" THEN CLS : VER
IFY ("@"+a$(4 TO ))CODE b,a: GO
TO 1110
2010 PRINT AT VAL "12",VAL "2": "
Just press ENTER to load the",AT
VAL "14",VAL "2": "first text fi
le (cassette only)"
```

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